1.0 PLOT LEVEL DATA

In general, plot level data apply to the entire plot. They are recorded from the center of subplot 1. If subplot 1 is not established, record from the lowest numbered subplot that is established.

ITEM 1010 STATE (CORE 1.1)

Record the unique FIPS code (Federal Information Processing Standard) identifying the State where the plot center is located.

When collected: All plots
Field width: 2 digits
Values:

01	Alabama	40	Oklahoma
05	Arkansas	45	South Carolina
12	Florida	47	Tennessee
13	Georgia	48	Texas
21	Kentucky	51	Virginia
22	Louisiana	72	Puerto Rico
28	Mississippi	78	US Virgin Islands
37	North Carolina		

ITEM R110 CYCLE

Record the number corresponding to the cycle in which current plot data is being collected.

When collected: All plots
Field width: 2 digits
Values: 01 to 99

ITEM R111 PANEL

Record the number identifying the unique panel to which each plot is assigned.

When collected: All plots
Field width: 1 digit
Values: 1 to 5

ITEM 1020 COUNTY (CORE 1.2)

Record the unique FIPS code identifying the county where the plot center is located.

When collected: All plots
Field width: 3 digits
Values: See Appendix 1

ITEM 1030 PLOT NUMBER (CORE 1.3)

Record the identification number for each plot, unique within a county.

When collected: All plots
Field width: 4 digits
Values:

Plot numbers in the south adhere to the following numbering system:

0001-0999	Standard field plots
4001-4999	Intensification plots (see Section 8.4)
9000-9999	Temporary and supplemental plots

ITEM R112 PHASE

Record the number identifying the phase under which plot data is being collected.

When collected: All standard field plots
Field width: 1 digit
Values:

2	Standard field plot (measured year-round)
3	Standard field plot with forest health variables (measured only during specified time frame)

ITEM 1200 P3 HEXAGON NUMBER (CORE 1.2)

Record the unique code assigned to each Phase 3 (former FHM) hexagon.

When collected: All Phase 3 plots
Field width: 7 digits

ITEM 1210 P3 PLOT NUMBER (CORE 1.2)

Record the P3 PLOT NUMBERS that are used to identify individual plots within the same Phase 3 (former FHM) hexagon.

When collected: All Phase 3 plots
Field width: 1 digit
Values: 1 to 9

ITEM 1040 SAMPLE KIND (CORE 1.4)

Record the code that describes the kind of plot being installed.
NOTE: If unable to locate a plot, contact the State FIA Coordinator (state employees) or the field coordinator (USFS employees).

When collected: All plots
Field width: 1 digit
Values:

1 **Initial plot establishment** - field-visited or remotely classified.

2 **Fixed plot remeasurement** - remeasurement of a previously established SRS **fixed radius** design plot or National design plot, field-visited or remotely classified.

3 **Replacement plot** - previously established SRS fixed radius design plot, prism point design plot, or National design plot that was replaced with a new plot because the original plot could not be relocated or plot data were lost.

9 **Prism plot remeasurement/Initial fixed plot establishment** – remeasurement of an established Southern or Southeastern Research Station **prism plot** design and initial establishment of the National design plot, field visited or remotely classified.

ITEM 1050 MANUAL VERSION

Record the version number of the National Core Field Guide that was used to collect the data on this plot. This will be used to match collected data to the proper version of the field manual.

When collected: All plots
Field width: 3 digits (x.yy)
Value: 1.61

ITEM 1060 CURRENT DATE (CORE 1.6)

Record the year, month, and day that the current plot visit was completed as follows:
Example: April 7, 2000 is coded 20000407

When collected: All plots
Field width: 8 digits
Values: yyyymmdd

ITEM R101 PAST DATE

Record the year, month, and day that the previous plot visit occurred. Past date can be obtained off the previous paper tally sheet.

When collected: SAMPLE KIND = 2 or 9
Field width: 8 digits
Values: Use same format as CURRENT DATE

ITEM 1160 QA STATUS (CORE 1.16)

Record the code to indicate the type of plot data collected.

When collected: All plots
Field width: 1 digit
Values:

1 Standard production plot (regular plot, no QA member present)
2 Cold check (QA reviews collected data while checking plot; may be done with or without standard field crew)
3 Reference plot (off grid- not an actual ground plot)
4 Training/practice plot (off grid- not an actual ground plot)
5 Botched plot file (disregard during data processing)
6 Blind check (QA crew remeasures the plot without reviewing the standard field crew's data; standard field crew is not present)
7 Production plot (hot check, QA member/s present during data collection)

ITEM 1170 CREW TYPE (CORE 1.17)

Record the code to specify what type of crew is measuring the plot.

When collected: All plots
Field width: 1 digit
Values:

1 Standard field crew
2 QA crew (at least one QA member is on the plot)

ITEM R102 CRUISER NUMBER

Record the unique code assigned to identify individual cruisers.

When collected: All plots
Field width: 3 digits
Values: 001-999

ITEM R103 NUMBER OF ACCESSIBLE FOREST LAND CONDITIONS

Record the number of accessible forest land conditions that are sampled on the plot.

When collected: All forested, partial, and landcleared plots
Field width: 1 digit
Values: 0-9

ITEM R104 NUMBER OF TREE ENTRIES

Record the total number of entries for the tree and sapling tally. This count includes entries to indicate no tally on a subplot or microplot.

When collected: All forested, partial, and landcleared plots
Field width: 3 digits
Values: 000-999

ITEM R109 NUMBER PRISM PLOTS REMEASURED/SUBPLOT CENTERS REVERTED

Record the number of prism plots remeasured on plots that were forested at the previous inventory. If plot center has reverted, then record the number of subplots that fall in a reverted condition. If both the present and the old past land uses at plot center are nonforest, then record 0.

When collected: All SAMPLE KIND = 9 forested, partial, and landcleared plots
Field width: 1 digit
Values: 0-5

If OLD LAND USE AT PLOT CENTER was forest: 1-5
(prism points remeasured)

If OLD PAST LAND USE AT PLOT CENTER is nonforest and PRESENT LAND USE is forest: 1-4
(subplot centers reverted)

If OLD PAST LAND USE and PRESENT LAND USE AT PLOT CENTER are both nonforest: 0

ITEM 1080 TRAILS OR ROADS (CORE 1.8)

Record the nearest trail or road within 1-mile horizontal distance of the plot center (subplot 1). Use the plot photo, maps, or reasonable observations made while traveling to the plot to determine nearest trail or road. If two or more trails or roads are estimated to be equally distant, code the better quality trail or road (lower code number). Base the coding decision on the condition of the road at the time of the visit.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values:

0 None within 1 mile
1 Paved road or highway
2 Improved gravel road (has gravel, ditching, and/or other improvements)
3 Improved dirt road (has ditching, culverts, signs, reflectors, or other improvements)
4 Unimproved dirt road/four-wheel drive road (has no signs of any improvements)
5 Human access trail- clearly noticeable and primarily for recreational use

ITEM 1100 ROAD ACCESS (CORE 1.10)

Record the first road access restrictions encountered while traveling to the **starting point**. These restrictions limit car and truck access to the **starting point** for the walk to the plot, and may occur on ownerships encountered before reaching the plot area. If a route without restrictions to the starting point is available, record code 0.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values:

0	None – no road access restrictions
1	Road blocked by locked gate or cable across road
2	Road blocked by a human-made obstruction across road (ditch, mound, etc.)
3	Road blocked by natural occurrences (trees blown over onto road, road or bridge washed out)
4	Posted no motorized vehicle signs; road present, but restricted area such as Wilderness or National Park where vehicles are not allowed
9	Other–specify in plot-level notes (e.g. owner makes you walk to SP)

ITEM 1110 PUBLIC USE RESTRICTIONS (CORE 1.11)

Record, if any, the restriction posted on the plot area that limits public use of the plot area; if more than one restriction occurs for the plot area, record the lowest number restriction present (1-3, 9). This item applies to the parcel(s) that the four subplots occupy, not access to the starting point.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values:

0	None – no public use restrictions
1	Keep out / no trespassing
2	No hunting or fishing
3	No dumping
9	Other - specify in plot-level notes

ITEM 1120, 1130, 1140 RECREATION USE 1, 2, 3 (CORE 1.12, 1.13, 1.14)

Record up to 3 signs of recreation use encountered within the accessible forest land portion of any of the four subplots, based on evidence such as campfire rings, compacted areas (from tents), hiking trails, bullet or shotgun casings, tree stands, etc. Record the recreation use that has had the most significant impact on the plot area first, then the second and third use. For example, in general numerous four-wheel drive or ATV trails would be coded before camping, and camping before hiking, and hiking before fishing. Use the coding system provided as a hierarchy. Do not repeat codes, except codes 0 and 9. Physical recreation evidence must be present to code 1-9. Also, disregard dumping where no evidence of recreation is present. Examine the plot area for clues before spending an exorbitant amount of time trying to find evidence that normally would not be found in the area; look for the obvious signs first.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values:

0	No evidence of recreation use
1	Motor vehicle (four wheel drive, ATV, motorcycle, snowmobile)
2	Horse riding, dog team trails, ski trails
3	Camping
4	Hiking
5	Hunting/shooting
6	Fishing
7	Boating – physical evidence such as launch sites or docks
9	Other – recreation use where evidence is present, such as human litter, but purpose is not clear or does not fit into above categories.

ITEM R105 HUMAN DEBRIS

Record the presence or absence of human debris on the forested portions of the 24 ft radius subplots. Do not code boundary paint and tree marking paint. If more than one category of debris is discovered on the plot, the record the lowest numbered item below.

This item codes debris type to assess dispersal characteristics and degree of permanence: materials that decay slowly, or rapidly, and light-weight materials that disperse farther from deposition areas. The item helps classify areas with and without human intrusions for scenic values and potential recreational experiences.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values: 0-3

0	None—No debris on the forested portion of the plot.
1	Noncombustible synthetic — includes glass, metal, aluminum beverage or food containers, discarded metal machinery, metal pesticide containers, metal fence, etc.
2	Combustible synthetics — includes plastics, styrofoam, tires, treated wood, nursery shade cloth, etc.
3	Combustible organic material from man-caused activities—includes yard waste, compost piles, livestock feed, wood debris from land clearing activity, slash from logging operations, etc.

ITEM 1150 WATER ON PLOT (CORE 1.15)

Record the water source that has the greatest impact on the area within the accessible forest land portion of any of the four subplots. The coding hierarchy is listed in order from large permanent water to temporary water. This variable may be used for recreation, wildlife, hydrology, and timber availability studies. This item is limited to water that is too small to qualify as non-census or census water. Census and non-census water are delineated as separate conditions on the plot.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values:

0 None – no water sources
1 Permanent streams or ponds too small to qualify as non-census water
2 Permanent water in the form of deep swamps, bogs, marshes and is in a forest condition, or without standing trees present and is less than 1.0 ac in size.
3 Ditch/canal – human-made channels used as a means of moving water, such as irrigation or drainage which are too small to qualify as non-census water
4 Temporary streams
5 Flood zones – evidence of flooding when bodies of water exceed their natural banks
9 Other temporary water – specify in plot notes

ITEM 1090 HORIZONTAL DISTANCE TO IMPROVED ROAD (CORE 1.9)

Record the straight-line distance from plot center (subplot 1) to the nearest improved road. An improved road is a road of any width that is maintained as evidenced by pavement, gravel, grading, ditching, and/or other improvements. Only examine the single photo that includes the plot pin-prick.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values:

1 100 ft or less
2 101 to 300 ft
3 301 to 500 ft
4 501 to 1000 ft
5 1001 ft to 1/2 mile
6 >1/2 to 1 mile
7 >1 to 3 miles
8 >3 to 5 miles
9 Greater than 5 miles

ITEM R106 HORIZONTAL DISTANCE TO URBAN OR BUILT-UP LAND

Record the straight-line distance from plot center (subplot 1) to the nearest evidence of urban or built-up land. Only examine the single photo that includes the plot pin-prick.

Urban or built-up land — Land that is 10 acres or more in size and comprised of areas of intensive human use with much of the land covered by manmade structures and associated clearings. Included are towns, villages, strip-developments along highways, power and communication facilities (excluding rights-of-way), industrial complexes, and institutions.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values: same as HORIZONTAL DISTANCE TO IMPROVED ROAD

Urban or built-up land is further defined as any 10-acre area (660 x 660 feet) composed of a mixture of land uses where urban or built-up land uses comprise more than 50 percent of the land area. Included are residential or commercial strips. Residential or commercial strips are at least 100 feet wide and 10 acres in size (4400 x 100, 2200 x 200, 1500 x 300, 1100 x 400, 900 x 500, etc.) with uniform spacing of structures, often with lawns, driveways, and parking lots.
Active surface mines, active sand and gravel pits, and other areas TEMPORARILY devoid of vegetation due to man's activities are NOT considered urban or built-up land. Similarly, naturally formed talus slopes and rock outcrops, mine tailings and soil pushed aside from surface mine operations, and bare soil associated with crop tillage are not urban or built-up land. Buildings, permanent product storage bins, and equipment parking areas are considered urban or built-up land.

The presence or absence of a store in a strip development has no bearing on this classification. Where a strip development consists of a mixture of farmsteads and residences, or farmsteads or other urban or built-up land, then consider farmsteads as built-up land. (Farmstead—a tract of land, usually with a house, barn, etc., on which crops or livestock are raised.) A farmstead is otherwise considered agricultural land.

ITEM R107 HORIZONTAL DISTANCE TO AGRICULTURAL LAND

Record the straight-line distance from the plot center (subplot 1) to the nearest evidence of agricultural land. Only examine the single photo that includes the plot pin-prick.

Agricultural Land — Land that is 10 acres or more in size and used primarily for the production of crops or livestock. Evidence includes geometric field and road patterns and the traces produced by livestock or mechanized equipment. Included are cropland, idle farmland, improved pasture, and other farmland (e.g., confined feeding areas, horse farms, farmsteads, nurseries, orchards, and vineyards).

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values: same as HORIZONTAL DISTANCE TO IMPROVED ROAD

ITEM R108 SIZE OF CONTIGUOUS FOREST LAND

Record the category below that indicates the size of the contiguous forest land around plot center (subplot 1). Only examine the single photo that includes the plot pin-prick to determine the size of the contiguous forest. If plot center is nonforest, then record 0.

Contiguous Forest Land — Forested areas that are at least 120 feet wide and 1.0 ac in size. Boundaries are nonforest areas that are at least 120 feet wide. Right-of-ways (e.g., power lines, pipe lines, woods roads, improved roads) are not boundaries unless the cleared area between the trees is at least 120 feet wide.

When collected: ACCESSIBLE FOREST LAND CONDITIONS > 0
Field width: 1 digit
Values:

0	Plot center is non-forest
1	1 – 10 acres
2	11 – 50 acres
3	51 – 100 acres
4	101 – 500 acres
5	501 - 2,500 acres
6	2,501 – 5000 acres
7	> 5,000 acres

GPS COORDINATES

Use a global positioning system (GPS) unit to determine the plot coordinates and elevation of all field visited plot locations. Coordinates are not required on any intensification plots.

COLLECTING READINGS

Collect at least 180 GPS readings at the plot center. Each individual position should have an error of less than 70 ft if possible (the error of all the averaged readings is far less).

Soon after arriving at plot center, use the GPS unit to attempt to collect coordinates. If suitable positions (180 readings at error ≤ 70 ft) cannot be obtained, try again before leaving the plot center.

CORRECTION FOR "OFFSET" LOCATION

If it is still not possible to get suitable coordinates from plot center, attempt to obtain them from a location within 200 ft of plot center. Obtain the azimuth and horizontal distance from the "offset" location to plot center. If a PLGR unit is used, use the Rng-Calc function in the PLGR to compute the coordinates of the plot center. If another type of GPS unit is used, record the azimuth and horizontal distance in ITEMS 1812 and 1813.

Coordinates may be collected further than 200 ft away from the plot center if a laser measuring device is used to determine the horizontal distance from the "offset" location to plot center. Again, if a PLGR unit is used, use the Rng-Calc function in the PLGR to compute the coordinates of the plot

center. If another type of GPS unit is used, record the azimuth and horizontal distance in ITEMS 1812 and 1813.

In all cases try to obtain at least 180 positions before recording the coordinates.

ITEM 1803 GPS UNIT (CORE 1.18.3)

Record the kind of GPS unit used to collect coordinates. If suitable coordinates cannot be obtained, record 0.

When collected: All field visited plots
Field width: 1 digit
Values:

0 GPS coordinates not collected
1 Rockwell Precision Lightweight GPS Receiver (PLGR)
2 Other brand capable of field averaging
3 Trimble GeoExplorer or Pathfinder Pro
4 Recreational GPS (Garmin, Magellan, etc.)

ITEM 1804 GPS SERIAL NUMBER (CORE 1.18.4)

Record the last six digits of the serial number on the GPS unit used.

When collected: GPS UNIT > 0
Field width: 6 digits
Values: 000001 to 999999

ITEM 1806 LATITUDE (CORE 1.18.6)

Record the latitude of the plot center to the nearest hundredth second, as determined by GPS. Record the latitude of the off-set point if the coordinates cannot be calculated.

When collected: GPS UNIT > 0
Field width: 8 digits (DDMMSSSS)
Values: Dependent on location (see Appendix 1)

ITEM 1807 LONGITUDE (CORE 1.18.7)

Record the longitude of the plot center, to the nearest hundredth second, as determined by GPS. Record the longitude of the off-set point if the coordinates cannot be calculated.

When collected: GPS UNIT > 0
Field width: 9 digits: (DDDMMSSSS)
Values: Dependent on location (see Appendix 1)

ITEM 1814 GPS ELEVATION (CORE 1.18.14)

Record the elevation above mean sea level of the plot center, in feet, as determined by GPS. Record the elevation of the off-set point if the coordinates cannot be calculated.

When collected: GPS UNIT > 0
Field width: 6 digits
Values: -00100 to +20000

ITEM 1815 GPS ERROR (CORE 1.18.15)

Record the error as shown on the GPS unit to the nearest foot. Make every effort to collect readings only when the error ≤ 70 ft. However, if after trying several different times during the day, at several different locations, this is not possible, record reading with an error of up to 999 ft.

When collected: GPS UNIT = 1 or 2
Field width: 3 digits
Values:
000 to 070 if possible
071 to 999 if an error of less than 70 ft cannot be obtained

ITEM 1816 NUMBER OF READINGS (CORE 1.18.16)

Record a 3-digit code indicating how many readings were averaged by the GPS unit to calculate the plot coordinates. Collect at least 180 readings if possible.

When collected: GPS UNIT = 1 or 2
Field width: 3 digits
Values: 001 to 999

ITEM 1812 AZIMUTH TO PLOT CENTER (CORE 1.18.12)

Record the azimuth from the location where coordinates are collected to actual plot center. If coordinates are collected at, or corrected to, plot center, record 000.

When collected: GPS UNIT = 2, 3 or 4
Field width: 3 digits
Values: 000 when collected coordinates represent plot center
001 to 360 when collected coordinates represent an off-set point

ITEM 1813 DISTANCE TO PLOT CENTER (CORE 1.18.13)

Record the horizontal distance in feet from the location where coordinates are collected to the actual plot center. If coordinates are collected at, or corrected to, plot center, record 000. If a Laser range finder is used to determine DISTANCE TO PLOT CENTER, offset locations may be up to 999 ft from the plot center. If a range finder is not used, the offset location must be within 200 ft.

When collected: When collected: When GPS UNIT = 2, 3 or 4
Field width: 3 digits
Values:

000 when collected coordinates represent plot center
001 to 200 when collected coordinates represent an off-set point and a Laser range finder is **not** used to determine distance
001 to 999 when collected coordinates represent an off-set point and a Laser range finder **is** used to determine distance

ITEM 1190 PLOT-LEVEL NOTES (CORE 1.19)

Use these fields to record notes pertaining to the entire plot. If the notes apply only to a specific subplot or other specific aspect of the plot, then make that clear in the notes.

When collected: All plots
Field width: Unlimited alphanumeric character field
Values: English language words, phrases and numbers